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Treatment of, by blood letting etc.

ENQUIRY

INTO THE

PROPRIETY of BLOOD-LETTING

IN

CONSUMPTIONS.

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IT *may be neceſſary to inform the Reader that this Treatiſe was written two years ago, and that the References to ſome Books and Caſes which are occaſionally mentioned, muſt be accommodated to that Time. The Author, however, hath had no Reaſon ſince to alter his Sentiments upon this Subject; he can ſafely affirm that every Day's Experience corroborates the Truth of them.*

Briſtol, June 1, 1775.

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EVERY part of the practice of phyſic ſhould be examined with care and attention, and every mode of healing ſhould be often and ſucceſsfully tried before it gains univerſal approbation. The importance of experience is ſo great, that the beſt phyſicians are fond of availing themſelves of it. But an experience which is ill-founded, and never contributes to a cure, is the moſt pernicious principle which can direct a practitioner, becauſe he knows not how to amend his errors, and from what ſources a good practice is to be derived. Every man, therefore, who pretends to medical knowledge, ſhould not be directed by facts alone, as they are ſimply preſented to him, but ſhould be able to account for them all as they happen, to reaſon upon them with clearneſs and preciſion, and confirm the ſtrong evidences of his ſenſes, by the beſt efforts of his judgment.

There is no diſorder hardly ſo common and ſo fatal in its conſequences as the conſumption. It is reputed a characteriſtic of this country and climate. And this city is not only the reſort of the inhabitants of the reſt of the kingdom, but is peculiarly productive of it itſelf. The phyſicians then who are ſettled here have every opportunity of examining into its nature, of ſurveying its progreſs through the ſeveral ſtages which belong to it, and inveſtigating all the cauſes from which it may ariſe. Whenever, therefore, any cures are performed, it is preſumed they muſt be done in a judicious and maſterly manner, but alas! the diſeaſe is deemed almoſt incurable, and no other remedies but palliative ones are adopted, by which indeed the poor patient meets his diſſolution with tranquility and calmneſs, but can never gratify the deſire of prolonging a life formed to be uſeful, and contributing his mite to the benefit of mankind. Shall we then ſay that this is owing to miſtaken views of the diſorder, or agree with the generality in condemning ſo many innocent fellow-creatures. If indeed we appeal to experience in the caſe, we ſhall find no aid from that quarter, for that will ſeldom acquaint us with any real cures. And if we try the teſt of reaſon, ſhe will give us no aid, becauſe we have deſerted her long ago, and truſted to an experience which hath deceived us. Happy indeed ſhould I be, if by drawing mens attention from a method which has ſo long been unſucceſsful, I ſhould direct them to think of a new one which may be influenced by reaſon, if it will not ſtand the teſt of experiment. At leaſt I think it will have a better foundation than the preſent, which can be ſupported neither by the one nor the other.—In order to do this as effectually as poſſible, I paved the way to it laſt year by publiſhing a ſet of Aphoriſms upon this ſubject, in which the opinions of the ſeveral authors who have given us their ſentiments upon it, are ſelected and arranged in a ſyſtematic manner. The reſult, however, of what they have done, hath amounted only to what we have repreſented—A judicious method of palliating the diſtreſsful ſymptoms with which this diſeaſe is accompanied. But let not this intimidate us from purſuing the cauſe in a different manner. Let us erect the tribunal of Reaſon, and bring the ſeveral methods of cure which have been already adopted to her bar.

Now the firſt which offers is that of Blood-letting; and this is ſuppoſed to be indicated by the hardneſs and frequency of the pulſe, by evident marks of inflammation and fever conſequent upon it, and by a ſhort and oppreſſed breathing, which requires the lungs to be relieved from the load with which it is ſuppoſed to be overwhelmed. To examine this affair more accurately, we ſhall firſt enquire what is the uſe and intention of this evacuation, and then what is the diſeaſe which requires to be relieved by it.

The human body is a machine which is made up of a certain quantity of fluids and ſolids, each contributing to the ſupport, maintenance and proper regulation of the other. Whilſt a due equilibrium then is preſerved between them, the body we may ſay is in perfect health; but whenever a deviation is made from it (and ſuch a deviation is often made by a variety of external accidents) then ſickneſs or diſeaſe of various kinds will obtain. Whenever the fluids prevail in too large a quantity, they will not only offend by this redundancy, but they will become of a different nature from their original conſtitution, and the ſolids likewiſe will be weakened, and become unfit to obey the laws of the ſyſtem. When the ſolids too are debilitated, let the cauſe be what it will, they will not act in that vigorous and juſt manner to which they have been accuſtomed. The conſequence of this will be that the fluids will increaſe in their quantity, or become offenſive in their nature—Whenever the former of theſe ſtates obtain, viz. that the fluids offend by quantity, then it is neceſſary that ſome evacuation ſhould take place, and reaſon juſtifies this practice;

tice; becauſe that it relieves the ſolids from that great labour which they muſt undergo in reſtoring the fluids to their proper proportion, if we were to direct all our attention immediately to them. The ſame obſervation will not hold good, however, where the fluids offend by an alteration in their nature. And the reaſon of this is to be derived from a view of the nature of the fluids. They are of a very heterogeneous nature, and their alteration may proceed from an unjuſt ſeparation of ſome parts which may prevail over the reſt, rather than from any new matter which may be added from external cauſes. The buſineſs of the phyſician then in this caſe is to enable the ſolids by a reſtoration of their native power, to act upon the fluids in ſuch a manner as will deſtroy this unequal ſeparation of their contents.

But to return to the caſe of redundancy. Where it prevails in too great a degree, the ſolids do not always find any violent effects in their ſubſtance from it, unleſs where a defect in them is the immediate cauſe from which it proceeds. But their action will always be influenced by it, becauſe they have a greater volume to act upon, and therefore a greater force is required to circulate the fluids properly. If this ſhould not happen, indeed the body muſt ſoon be overwhelmed by the weight of fluids, and no remedy could be adminiſtered ſpeedy enough for relief. This increaſed action, however, tends, though in a gradual manner, to induce more and more debility, and at length no longer able to ſuſtain the combat, the ſolids are obliged to decline it through neceſſity, and loſe their whole power of action. The conſequence of which is the moſt dreadful event which can happen to the human frame. If the fluids of the human body by too great a quantity diſtreſs and debilitate the force of the ſolids, they will have the ſame effect when they circulate in too ſmall a proportion. This, perhaps, is more eaſily to be explained than the former. There is a power or force in the animal machine which always diſpoſes it to action. It is not our buſineſs to take notice of this power in this diſſertation, but we may juſt hint that we mean by it the nervous influence, or that ſentient principle which derives its origin from the brain, and is extended through the whole ſyſtem. If this force be exerciſed in too great a degree, it will always occaſion debility, becauſe it is the ſource of all action in the body. This was alluded to before, where too great a plenitude obtained. It is equally evident in this caſe of too great a deficiency of the fluids. To explain it, however, it is neceſſary to inquire into the manner by which the ſolids always act upon the fluids in their circulation. This is always done by means of a contraction of hollow veſſels. Now if it be neceſſary to puſh forward a very ſmall quantity of fluid through ſuch veſſels, which for want of it are apt to collapſe, the contraction muſt be very conſiderable to perform it, and which will require a greater force, and of conſequence a greater expence of the nervous power. And beſides this, at the ſame time the proper ſupply by which the nervous ſyſtem is ſupported is prevented.* There is no neceſſity, however, to appeal to any principles of the animal œconomy to be convinced that a loſs of the fluids will be attended with any degree of debility. It is the ſole means almoſt by which we deprive brute animals of their lives, and I am afraid that too many likewiſe of the human ſpecies have been ſacrificed in the ſame way to the prejudices of cuſtom, and the preſumption of ignorance.

Blood-letting is that evacuation which is moſt eaſily performed, and which applies moſt immediately to the vital power. Whenever therefore we are certain of too great a redundancy of the natural fluids, which we may now call the blood, it is the remedy which naturally preſents itſelf to us. There are certain marks too by which we may judge of this plenitude; nature hath not left us without a guide in an affair of ſuch conſequence. Theſe marks are reputed great fullneſs and hardneſs of the pulſe, heat over the whole body, heavineſs of the head, redneſs of the eyes, inability to motion, and often violent pains either univerſally, or in ſome particular part. There is another mark too which is taken from the blood itſelf, which is called a buff or ſize, a part of the blood ſeparated from the reſt ſwimming upon the top in form of a white cruſt. We may diſpute, however, that this is a mark of too great a redundancy of the fluids. It may be conſequent indeed upon that violent action of the ſolids which is induced by this plenitude, but is no ſign of its exiſtence, for it remains a long time after this has been deſtroyed.—The ſame obſervation may be made with regard to many of the other ſigns, ſuch as pain, heat, redneſs of the eyes, &c. all which betray the too great action of the veſſels, but have no exiſtence till that action hath taken place. The principal ſigns of plethora or plenitude then are, the heavineſs of the head, which is generally attendant upon it, and the fullneſs of the pulſe, which is its conſtant ſign—But what ſhall we ſay to a laborious reſpiration. The lungs circulate an equal quantity of blood with the reſt of the body; whatever therefore increaſes the volume of this fluid, muſt interfere, one might think, with reſpiration, which is their action—But we do not find this always to be the caſe, and we may account for it perhaps from the ſoft texture of the lungs, which will allow its fibres to be ſtretched without any great excitement to contraction. Whenever it ariſes to a great degree, they are violently affected, and blood-letting is immediately required to give relief. But reſpiration is often laborious from other affections of the lungs, or when the plenitude of fluid confined to their ſubſtance. We are not to conſider it then as an abſolute mark of redundancy, but to take many other circumſtances into the account before we determine to uſe that evacuation which is of ſo much conſequence to the animal ſyſtem.

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* Vide Macbride's Introduction to the Practice of Phyſic, p. 73.

There have been many and violent diſputes long ere this upon the propriety of bleeding in almoſt all caſes. And mankind have often been ſo much ſwayed by prejudice and an ill-founded theory, as to vindicate, with the utmoſt virulence, both the univerſal practice of it, and the general abſtaining from its uſe. And whilſt on one ſide it hath been advanced, that more people have been drowned in their own blood than in the ocean—on the other ſide it hath been alledged, that more have been deſtroyed by the lancet than by the ſword. That candour and liberality of ſentiment which ſhould influence every man in the inveſtigation of the truth, will enable him to ſee the errors of theſe violent partizans. He will adopt for his guide the exerciſe of his rational faculties, and he will lay down ſuch marks for the propriety or impropriety of this evacuation, as his own reaſon or experience, and the reaſon and experience of all wiſe men before him have pointed out to his view. It is no trifling matter, the lives of thouſands may depend on an inaccuracy of judgement.

What cruelty muſt it be then to lay down a rule which ſhall incapacitate our judgement from its proper exerciſe. We have ſeen that great debility is the conſequence of too great a plenitude, or too great a deficiency of animal fluid. An exceſs then in either of the extremes we mentioned, muſt be attended with very fatal conſequences. The judgment of a phyſician is required to eſtabliſh that juſt equilibrium upon which health and ſafety depends. And indeed it is of ſo much conſequence, that no trifling judgment ſhould be entruſted with it. The beſt phyſicians may err in this reſpect. And none but good phyſicians, and very able practitioners, ſhould ever preſide over the direction of the lancet.

If we were to examine into the hiſtory of medical caſes from the beginning of the world to this time, we ſhould find perhaps that more injury than advantage hath been ſuſtained by bleeding. And the reaſon of this is, that ſo eaſy a remedy has been taken up by practitioners of all underſtandings, and has been made more the inſtrument of ignorance and craft, than of ſound judgment and honeſt endeavours to do good. For even in thoſe caſes where evident marks preſent themſelves to indicate its uſe, other circumſtances of great conſequence to the conſtitution will prohibit it. From theſe marks indeed we can judge of the propriety of this evacuation with regard to the part which is immediately affected. But there may be ſuch a general weakneſs of the whole ſyſtem as would endanger the life of the patient, if ſuch a practice were to be put in execution. In ſuch a caſe we are to run the riſque of inducing ſome further diſeaſe, rather than by alleviating the preſent ſymptoms, to procure an immediate diſſolution. I believe it often happens more frequently indeed than is ſuſpected—That to cure a diſorder we deſtroy the patient; ſo dangerous is it to confide only in the relief of a few prevailing ſymptoms. This weakneſs too is a very fallacious ſign, for it may ariſe from, and indeed often does accompany that ſtate of the conſtitution where the moſt copious bleeding is required, whilſt at other times it is a mark by which we are ſcrupulouſly to avoid this evacuation. Notwithſtanding this ſome people will tell you, that the indications for blood-letting are extremely plain and eaſy, and that very little judgment is required to determine either the time for performing it, or the quantity of blood which is to be taken away. They will ſay that it is always neceſſary in the beginning of inflammatory fevers, by which they mean fevers accompanied with a hard full pulſe, &c. that ſo much is to be taken away as to procure fainting, and that it is to be repeated as often as any ſize or white cruſt is to be ſeen on the ſurface of the blood—I will not ſay that ſuch practitioners have no better ſucceſs than their neighbours, but this I will maintain, that many perſons have been relieved where no ſuch method hath been purſued, and where it is moſt probable they would ſoon have yielded to their fate had they been treated in ſuch an Herculean manner. I will not ſay but that it may be ſometimes neceſſary to take away a large quantity of blood, but then it ſhould be done with the greateſt diſcretion, and after the matureſt judgement upon the caſe.—There can be nothing more precarious than the rules relating to the ſize or buff upon the ſurface of the blood; till of late we did not know any thing of its nature, and it appears from the experiments of the ingenious Mr. Hewſon, to ariſe in conſequence of a diſſolution of that fluid, rather than to be a mark of its viſcidity and coheſion. Beſides, this buff will remain often of the ſame thickneſs during the whole progreſs of the diſeaſe, and till every diſtreſſing ſymptom is removed. If we were to adhere then to ſuch a rule, we ſhould never have finiſhed bleeding till by this injudicious practice we had reduced our patient to the laſt extremity. The beſt, nay the only rule which I think ought to be obſerved with regard to bleeding, is with a clear and unprejudiced judgment to watch every ſymptom attendant upon a diſeaſe, and to conſider the powers which tend to induce debility, and the influence they have over the conſtitution. If upon a contemplation of all theſe we find they have not eſſentially impaired the animal machine, or have not too much exerted their action, we may then have recourſe to that evacuation which will procure the moſt ſpeedy relief, and we are to purſue it as long as we find the ſymptoms of plenitude are urgent, and other weakening powers have not interfered too much in producing their common effect. It is true that this, as well as every other evacuation, will occaſion great weakneſs, ſuch as is unavoidable in the cure of diſeaſes, and ſuch as is eaſily repaired. The pulſe will generally then be our guide in this caſe, but it will ſometimes deceive us, and then indeed we muſt have recourſe to that judgment and experience which every man adopts for himſelf, but has no expreſſions to convey to another.

Let us now examine into the propriety of this evacuation, in the caſe of conſumptions, a diſeaſe ſo generally fatal to the human conſtitution. By referring to thoſe aphoriſms which I publiſhed laſt ſummer upon this diſeaſe, we ſhall find that in the ſtage which entitles it to this denomination, when the body begins ſenſibly to decay, that it conſtantly ariſes from an ulcer of the lungs, which by feeding the blood with acrimonious ſtimulating matter, occaſions an undue exerciſe of the vital powers, and excites unnatural evacuations; by both which that debility is induced which ends at laſt in the moſt deplorable death—An ulcer always ariſes from inflammation, and of conſequence may depend for its primary origin on an univerſal or partial plenitude of the fluids. In the caſe before us we may ſuppoſe it ariſes from both, univerſal in being dependent on a ſtoppage of perſpiration, which returns the perſpirable matter into the maſs of blood, and thus increaſes its volume; and partial in fixing in the lungs or pleura, the membrane which ſurrounds them, and there producing all its direful effects. In every inflammation the blood is puſhed into ſome veſſels which are not capable of reſiſting the force with which it is urged forwards by the vital powers. The firſt object then of a phyſician who meets with ſuch a caſe, is to endeavour to drive it back into its proper channels, and to calm that power in the vital organs by which it is driven on with ſuch impetuoſity—The means of effecting this purpoſe will be then to empty the veſſels of that large quantity of fluids they contain, and thus enable them to circulate their accuſtomed quantity with eaſe. Here then blood-letting, with the care and precaution we have already mentioned, will be abſolutely neceſſary. But an inflammation may ariſe likewiſe from another ſource. The blood may not only be injured by being overloaded or deprived of its proper proportion, but when it is not circulated equally and with certain powers through the ſyſtem, it ſeparates into a number of parts which were concealed in the general maſs, and thus conſtitutes a fluid of quite a different nature—whilſt theſe diſtinct parts wander about in the general circulation, and irritate the fibres over which they paſs. By this a quicker circulation is produced, the reſiſting power of ſome veſſels is not able to ſuſtain the force of it, the blood is driven into them, and an inflammation is occaſioned. This may happen too where there is no general plenitude, and it may happen where there is, and ſomething of this kind accompanies every inflammation—Where it ariſes, however, without a plenitude of the fluids, we are certainly to be very cautious with regard to the uſe of the lancet; not that it is abſolutely to be prohibited, but it muſt be conſidered merely as a palliative remedy. It is deſigned in this caſe to enable a ſmall number of veſſels to exert their proper force over fluids which are forced into them. But at the ſame time it weakens the ſyſtem in general, and thus takes off from the original power which the ſolids have of circulating the fluids.—Where there is no plenitude, debility muſt be always induced by bleeding. In all caſes therefore where acrimony prevails, this evacuation will be injudicious, and muſt be admitted as ſparingly as poſſible. It will depend entirely on the natural ſtrength of the patient, more perhaps than upon any ſymptoms which accompany the diſeaſe. And there may be ſome of ſuch low and weak habits who will never be relieved by it, but muſt always ſuffer from its uſe. The ſame obſervations will hold good, whether we conſider the inflammations to ariſe from any particular part which confines the blood within itſelf, or whether the veſſels are ruptured, and pour out their contents; with this difference only, that a general plenitude will ſeldom occaſion a rupture of the veſſels; ſome degree of acrimony muſt be added to produce this effect, and yet bleeding is generally indicated, becauſe as there muſt be an evacuation of blood, it is much better it ſhould be in a place where we can have a proper command over it, than in that ſituation where it defies all the aſſiſtance we would wiſh to afford. Where, however, great acrimony prevails, it is much better that we ſhould endeavour to ſtop this ſpitting of blood by the lighter ſtyptics (for it will not bear the moſt powerful ones) than by blood-letting induce ſuch a debility as is not eaſily recovered.

An ulcer then we ſee is always produced by a previous inflammation, but in the ſtate in which we ſee it, the inflammation is deſtroyed, and every ſymptom of plenitude removed. It is now a diſeaſe which depends entirely on an acrimony, introduced into the blood by a ſeparation of its conſtituent parts—The blood poured into veſſels not uſed to convey it, not only by ſtagnation but the violent action it induces upon the ſolids of ſuch veſſels, if it continue in them any length of time, will undergo that diſſolution which is common to all heterogeneous fluids—We have not indeed been able abſolutely to aſcertain the nature of that ſubſtance, which is conſtantly the product of an inflammation; in general it is of a mild nature where the blood is in a perfect ſtate before, and the ſolids are enabled to act with vigour; but where the body is previouſly debilitated, and the fluids are in an acrimonious ſtate, there a ſubſtance of the moſt offenſive nature is produced, and which when abſorbed into the ſyſtem, is the occaſion of all the dreadful effects we ſee attendant on a conſumption. We derive our ideas of ulcers in general from what are the conſequence of wounds in ſome external part of the body; in which by great care and aſſiduity, though not always without the aid of internal medicines, the Peruvian bark, mercurials, purgatives, &c. with a bland mild diet, we bring on a good digeſtion, which means the production of that inoffenſive ſubſtance called true pus. An ulcer may likewiſe ariſe in an external part without a previous wound in the fleſh, to which we may reſemble an hæmoptoe, or ſpitting of blood. It may ariſe, I ſay, in conſequence of a general plenitude, when the fluid is forced into the external ſkin, rather than into any internal part, and then it is called a phlegmon or abſceſs. Here too when the body is in a perfect ſtate of health, a laudable or good pus will be produced, and being opened with a knife or cauſtic, no bad conſequences will follow—If the matter produced ſhould be too acrimonious, and partake of a different nature, we muſt then have recourſe to the ſame remedies which were employed in thoſe ulcers we mentioned before. If an abſceſs, or, in conſequence of it, an ulcer ſhould ariſe in any internal part of the body, and where no means of opening it can be made uſe of, we are to endeavour in the ſame manner as in the former inſtances to render the digeſtion as good as we can, and then to exude it through the pores of the ſkin, or tranſlate it to ſome external part, at the ſame time taking the greateſt care of the part which is injured, and applying thoſe peculiar remedies which are appropriated to its relief.

We ſhall ſuppoſe that an abſceſs, or a wound, ariſes in the ſubſtance of the lungs, one of the moſt tender organs of the human frame, and then it forms this diſeaſe which is at preſent under our conſideration. We are to enquire then whether blood-letting is a means of relieving the ſubſtance of the lungs from the injuries it would otherwiſe ſuſtain, and whether that relief is adviſable in order to reſtore the health of a conſumptive perſon? The lungs, it is well known, circulates in a given time the ſame quantity of blood as the reſt of the body. The greateſt part of their ſubſiſtence then conſiſts of fluid, which in one beat of the pulſe paſſes through the lungs, and in another paſſes through the whole ſyſtem of blood-veſſels; every obſtruction then which ariſes in them muſt interrupt the courſe of the circulation through their ſubſtance, and occaſion very ſoon an univerſal affection of the body. Every diminution too of the quantity of blood, by whatever means occaſioned, muſt influence the circulation through the lungs. Now it will be evident that not only during a ſtate of inflammation, but even during every period of a conſumption, an obſtruction to the paſſage of the blood through the lungs will be occaſioned, and blood-letting, which always will relieve ſuch an effect, will be indicated. This is evident too to experience. There is not a more troubleſome ſymptom during the whole courſe of this diſeaſe, than a laborious reſpiration, and this not only in the ſtage of inflammation, but long after that hath been removed, and even when the body is quite exhauſted and worn out. Blood-letting, likewiſe, frequently repeated, and in ſmall quantities, hath been uſed with ſucceſs to alleviate this ſymptom, and a buff hath been almoſt always found upon the blood whenever it hath been taken away. If then nothing more was requiſite than to palliate ſuch a complaint, no doubt but this evacuation would be extremely judicious. But when we come to enquire how we ſhall reſtore health to a conſumptive perſon, we muſt reaſon after a different manner. And that health may be reſtored I believe is no chimæra.

Every view which we have taken of this ſubject, preſents us with a diſeaſe which depends on an acrimonious nature of the animal fluids. Moſt of thoſe ſubjects which operate by way of remote cauſe, have this tendency, and the debility of the ſolids, which are incapable of diſcuſſing an inflammation, naturally are diſpoſed to produce it. This diſeaſe, particularly in this country, generally ariſes from this ſource. A perſon of tender and delicate frame, after the fatigues and inconveniences of dreſſing, by which half the day almoſt is engaged, and with all that anxiety which a fondneſs of admiration will excite, goes into a public room, which is not only heated by the number of breaths and candles, and fires which it contains, but is replete likewiſe with noxious effluvia of every kind. Hence ſhe repairs frequently into cold damp night air, and then is obliged to ſack whey, or other warm liquors, and a warm overheated bed, to reſtore again the perſpiration which is obſtructed; this occaſions a perpetual cooling and heating of the body by fits, and excites a high degree of animal exertion to ſupport the conſtitution in its proper ſtate—In time this produces great debility, this debility produces acrimony, and this acrimony produces inflammation. Simple plenitude of the fluids then hath very little to do with the origin of this diſeaſe. Sometimes, indeed, we find that a ſudden expoſure to cold will produce an inflammation, where no prediſpoſing cauſe hath operated on the ſyſtem to produce acrimony. But this diſeaſe ſeldom terminates in a conſumption. To one of this kind, we find hundreds I may almoſt ſay, in whom it always begins with a cold, that is accompanied with a ſhort dry cough, which is hardly taken notice of till it is too late to afford relief for it. So much for the origin of the diſeaſe. But if we purſue it to that ſtage in which the whole conſtitution ſeems to be affected, we ſhall find that the ſource of every ſymptom is a high degree of acrimony in the fluids, and of debility in the ſolids, of the ſyſtem which mutually act upon each other to produce the moſt direful effects—How then is blood-letting indicated, which we have all along conſidered as productive of weakneſs where great plenitude did not obtain, and to which only it was accounted a relief.—But we have already ſeen that blood-letting will be of ſervice to the lungs which are oppreſſed by too great a weight of fluid, though an univerſal plenitude doth not obtain, and that it relieves that laborious breathing which makes life ſo uncomfortable, and often threatens a ſuffocation. We will allow that bleeding does at the time relieve this complaint; but when it returns, and return it will, it recurs with double violence, till the patient is obliged to ſubmit to its force.

And the reaſon of it is this—Every time we bleed, we abſtract ſo much from the ſtrength of the patient; by this means then the animal power is not able to ſtruggle with the ſtimulus which occaſions the ſhort breathing, but muſt yield to it for want of force to ſtand againſt it. Bleeding indeed frees it for the preſent from this ſtimulus, which aroſe from too much blood in the lungs; but then as the body hath loſt ſo much more ſtrength, when the blood is again repaired, the ſtimulus of it is much ſtronger than it was before, and ſo it goes on till death cloſes the ſcene. There is another inconvenience too ariſing from this practice, and which very much invalidates its uſe. It is this, that as it induces debility, ſo it prevents all acceſſion of ſtrength; not only the circulating organs loſe all their powers, but thoſe of digeſtion likewiſe ſuffer from a general debility. So that upon the whole we may obſerve, that in an incipient conſumption much bleeding may be prejudicial, and in a confirmed one it will certainly be productive of injury; it is at beſt but a palliative remedy; and it can never be properly ſupported as a means of cure in this diſorder, till this maxim ſhall obtain in the practice of phyſic, that the ſafety of a particular organ upon which life *may* depend is of more conſequence than the preſervation of the whole ſyſtem, without which life cannot be ſupported. By attending to the ſyſtem in general, we may perpetuate a very troubleſome diſeaſe; but by attending to a particular organ, we may haſten an event with which few people would exchange the worſt of diſeaſes.

I do not intend by this abſolutely to deſtroy bleeding in this diſeaſe in almoſt any ſtage of it. The ſymptoms of ſhort breathing and cough, may be ſo urgent as to require it, when every other reaſon ſhould perſuade us to the contrary. But my objection is to laying down any general rules about ſuch an evacuation, and truſting to the utmoſt ignorance for the execution of it. Better were it that ſuch a practice ſhould be abſolutely proſcribed, than that it ſhould be adopted as a habit, which muſt inevitably deſtroy in the end. It is very common for patients under this complaint to be ordered to bleed once or twice in a week for a conſiderable length of time, and to require no other opinion but their own feelings for the propriety of it. This would certainly be injudicious if the complaint were merely inflammatory, or proceeded from too great plenitude of the fluids, becauſe even in ſuch caſes, the time of bleeding and quantity of blood to be drawn, require a good deal of judgment to determine; and this will need no explanation to any one who conſiders the many unforeſeen accidents upon which every diſeaſe, the moſt ſimple as well as the more comlicated will depend. Who can guard againſt the changes of air which will be felt even in a ſick chamber, though kept ever ſo cloſe! Who can prevent the viciſſitudes which will be occaſioned in every conſtitution from thoſe accidents by which a ſick man's mind is more diſturbed than that of a perſon in health! But this diſeaſe runs ſo quick into a ſtate of ulceration, that it requires the greateſt exactneſs to watch its progreſs. Who can do this for themſelves, where their fears may aggravate, or their good opinion of their complaint may conceal many ſymptoms to which they are ſtrangers. Another excuſe may be made for thoſe who drink the Hotwell waters for repeated bleeding in this diſorder. The great fulneſs which the quantity of water taken in will occaſion. There is no doubt but this will add to the volume of the blood, but then it muſt add to the fluidity of it likewiſe, and it is much more eligible to ſuffer it to paſs through the circulation, and be carried off by ſome other evacuation in the ſame ſtate in which it was received, than to be taken away with that pure fluid which is of ſo much conſequence to the ſtrength of the conſtitution. Beſides the Hotwell-water ſhould be taken in much ſmaller quantity than is uſually directed, its virtues by this means would be aſcertained more clearly, and it would continue in the body a ſufficient time to produce every effect which can be expected from it. If indeed the human body in this diſeaſe wanted a mechanical cleanſing,* a quantity of water might anſwer this purpoſe, and then any other water would be of the ſame efficacy with that at the Hotwells. This is not however an indication in this diſeaſe, and the water ſhould be given in ſuch a manner as not to increaſe the volume of the blood more than is juſt, till it has produced its proper effect, and then it ſhould be carried off by ſome natural excretion. I would rather yield every advantage that can be derived from this remedy, than qualify it by an evacuation ſo pernicious as blood-letting; for ſuch practice as this is but ſporting with the conſtitution of a fellow-creature, over which we have no right to aſſume an authority. We deſtroy with one hand, the benefits we beſtow with the other, and lull aſleep in careleſs ſecurity the victims of our deception. The only apology we can make for ſuch a conduct, is, that we keep the mind free from diſtreſs and agitation, and the uncomfortable thoughts of a dying man. But then why ſhould we keep him at a diſtance from his home, and occaſion an unneceſſary expence when no advantage can be expected from it? Why ſhould we not attempt a method which may be more ſecure?

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* This puts me in mind of the caſe of a gentleman, which I have heard related, who after drinking the Hotwell-water without ſucceſs, was cured by a gallon of common water, drank every day.

It would be unjuſt however to hint at ſuch a method unleſs it were very probable it would ſucceed. Upon a more accurate examination than we have given of this ſubject, it may be found that no other than palliative remedies can be admitted in this diſorder, and that if that ſhould be the caſe, bleeding bids the faireſt to procure eaſe during the ſhort remainder of exiſtence, which is allowed the patient. Were this abſolutely the fact, I would willingly embrace the maxim, and adopt it as the rule of my practice; but I believe there are ſome reaſons to doubt it; and theſe are derived not only from a careful reflection, but in ſome meaſure from experience likewiſe. An obſtinate and perverſe woman was admitted as an out-patient to the Briſtol Infirmary, Jan. 25, 1768, the ſtrength and fullneſs of her pulſe, her ſhort-breathing, dry hard cough, &c. ſeemed to indicate bleeding, but ſhe would not ſubmit to it upon any account; cooling medicines therefore were ordered, with a linctus of ſperma-ceti to aſſuage the cough. Theſe, however, ſeemed to have but very little effect, the ſhortneſs of her breath increaſed, and I had great apprehenſions of her being ſuffocated for want of relief. She ſtill perſiſted in her refuſal to be bled, and the ſtate of her pulſe, and the weakneſs and delicacy of her frame prohibited the uſe of any medicines of a heating or ſtimulating nature, and all that I could venture to give was a ſmall quantity occaſionally of the Tinct. fætid to relieve her fainting. Indeed about a month after her admiſſion I attempted to give a mixture of Lac Ammoniac and Squills, but it heated her too much, and diſagreed with her ſtomach, ſo that I was obliged to deſiſt from it, and return to the ſaline mixture and pectoral medicines as before. In this way ſhe has continued ever ſince, and has never been bled more than once, but has perſiſted in the other medicines, with now and then a bliſter and a vomit, as ſhe can bear them, and a doſe of Rhubarb when her ſtomach is much diſordered. She has frequently aſthmatic fits, which nothing but time will relieve. She has as much fleſh as when ſhe firſt came to the Houſe, but is very much in an emaciated ſtate, and is conſtantly ſubject to hectic ſweats, and many other complaints attendant on a conſumption. Quere, Would frequent bleeding have cured this woman? Has not her ſtrength been preſerved by abſtaining from it! This caſe and bleeding only, when very urgent ſymptoms have occurred, have diſſuaded me very much from this evacuation; and I truſt more to the neutral ſalts, to which I frequently add the different prepuration of antimony; and wherever the breath will permit, I give the cortex, and other ſtrengtheners of the ſyſtem.

But there is a plan which hath not been without its advocates in the cure of this diſeaſe, and which bids the faireſt of doing it radically of any that have been mentioned, and I cannot help thinking that it might be practiſed much oftener than it is. This is by the operation for the empyema, or opening the cavity of the thorax, and diſcharging the matter of the abſceſs gradually at the aperture. The great objection to this operation is the uncertainty of an abſceſs being formed in the cheſt, and the ſituation of it when it is formed. But I cannot think theſe of any very great conſequence. If we watch the progreſs of the diſeaſe, we may eaſily aſcertain the formation of pus, but it is principally known by thoſe frequent ſhivering periodical fits which are often taken for an intermittent fever. Whenever theſe occur, we may be certain an abſceſs is forming, which in time will burſt, and if it be diſcharged into the cavity, muſt ſoon deſtroy the patient; and if diſcharged upwards, will often ſuffocate him before proper relief can be adminiſtered. With regard to the ſituation of it likewiſe, I think we need not be at all ſolicitous. If a wound be made in any part lower than where the abſceſs is formed, the matter would not flow out immediately, yet in proceſs of time it would work its way to that place which is continually ſtimulated by the air, and whenever it broke, as all fluids naturally tend to depending ſituations, it would find a place at which it would immediately be diſcharged. Whenever then we are certain that an abſceſs is formed, if we find we can do nothing by exudation, or diſcharging the matter of it by ſome natural excretion, what injury would it be to make an opening into the thorax, and keep it conſtantly open by means of a canula, or pipe, made for that purpoſe? The original operation would be the only inconvenience in this manœuvre, and that is far from being painful or tedious. This, however, I ſubmit to the opinion of the faculty, and ſhall eſteem myſelf extremely happy, if by hinting at ſuch a ſcheme I ſave a life which otherwiſe muſt have been loſt.

The great advantages which attended an operation of this kind under my direction, have perſuaded me of its utility. And I only want greater authority and the ſanction of wiſer men to put it often in execution. In the caſe which I refer to, and which I hope the ingenious ſurgeon who performed it will ſoon lay before the public, there was no evident fluctuation in the cheſt, but the patient ſpit a pint or more of matter in a day, and was waſting away with every hectic ſymptom. The opening was made low down upon the cheſt, and as the patient lay upon his ſide, nothing was evacuated at the wound, but the moment he was raiſed up the purulent matter guſhed out in a torrent, and was diſcharged in a very conſiderable quantity. The wound was kept open by a canula, and every day a freſh diſcharge, leſs and leſs, was made for about two months, when it entirely ceaſed, and by the uſe of the bark and a milk diet, the patient recovered his health, and was living not 12 months ſince perfectly ſound, and free from every return of the complaint.